

What is claimed is:

1 *Sub A¹⁰* 1. A method of acquiring program guide information for channels,
2 wherein the program guide information for each channel is acquired by scanning
3 accessible channels while received program is not displayed.

1 2. The method of acquiring program guide information for channels as
2 claimed in claim 1, wherein program guide information of accessible channels is
3 obtained by a tuner while program received by the tuner is not displayed.

1 *Sub C²* 3. A program guiding method in which a program list for channels is
2 displayed in response to a program guide command, the method comprising the
3 steps of:
4 acquiring program guide information of accessible channels;
5 storing the acquired program guide information;
6 writing a program list on the basis of the stored program guide information;
7 and
8 displaying the written program list to a user.

1 *Sub A¹¹* 4. The program guiding method as claimed in claim 3, wherein a
2 message for indicating that a user must wait until the program list is written is
3 provided.

1 5. The program guiding method as claimed in claim 3, further
2 comprising the step of determining whether program guide information is effective
3 by comparing a current time to an effective period of stored program guide
4 information, and proceeding to the program list writing step when the stored
5 program is effective, before the step of acquiring program guide information.

1 6. The program guiding method as claimed in claim 3, wherein the step
2 of acquiring the program guide information comprises the substeps of:
3 writing and displaying a program list including program guide information of
4 channels tuned before a program guide command is applied, from the stored
5 program guide information; and

6 acquiring program guide information for each channel by searching for
7 accessible channels in a background operation while the program list is referred
8 to.

1 7. The program guiding method as claimed in claim 3, wherein in the
1 search step, the sequence of accessing channels is determined by the adjacency
2 between channels tuned before the program guide command is applied.

1 8. The program guiding method as claimed in claim 7, wherein in the
2 search step, the order of priority of channels having the same adjacency is
3 determined according to a channel up/down command input before corresponding
4 channels are accessed.

5 9. The program guiding method as claimed in claim 7, wherein an
6 upward or downward direction is preferential when no channel up/down command
7 is applied.

8 10. The program guiding method as claimed in claim 3, wherein in the
9 search step, channels are searched for upward or downward from the channel
10 tuned before the program guide command is applied.

11 11. The program guiding method as claimed in claim 3, further
12 comprising the step of writing a probability distribution of tuned channels, wherein
1 the channels are searched for in the order of priority according to the probability
2 distribution of channels in the search step.

3 12. A program guiding method in which a program list for each channel
4 is displayed in response to a program guide command, the method comprising the
5 steps of:

6 writing and displaying a program list including program guide information of
channels tuned before a program guide command is applied, from the stored
program guide information;

7 acquiring program guide information for each channel by searching for
8 accessible channels in a background operation while the program list is referred
9 to;

10 storing the acquired program guide information for each channel;
11 rewriting a program list on the basis of the stored program guide
12 information; and
13 displaying the rewritten program list to a user.

1 13. The program guiding method as claimed in claim 12, wherein in the
2 guide information acquiring step, the sequence of accessing channels is
3 determined by the adjacency between channels tuned before the program guide
4 command is applied.

14. The program guiding method as claimed in claim 12, wherein the
order of priority of channels having the same adjacency is determined according to
a channel up/down command input before corresponding channels are accessed.

Sub C4
15. The program guiding method as claimed in claim 13, wherein an
upward or downward direction is preferential when no channel up/down command
is applied.

Sub A12
16. The program guiding method as claimed in claim 11, wherein in the
guide information acquiring step, channels are searched for upward or downward
from the channel tuned before the program guide command is applied.

Sub C6
17. The program guiding method as claimed in claim 11, further
comprising the step of writing a probability distribution of tuned channels, wherein
the channels are searched for in the order of priority according to the probability
distribution of channels in the search step.

Sub A13
18. The program guiding method as claimed in claim 11, wherein in the
display step, when the program guide information of a corresponding channel is
not stored, a message screen for indicating "please wait" or "acquiring guide

information" is displayed, and when the program guide information of channels tuned before the program guide command is applied is acquired by the acquiring process, the program guide information of a corresponding channel is displayed.

19. An apparatus for acquiring the program guide information of accessible channels and guiding program guide information acquired in response to a program guide command in a multichannel receiver, the apparatus comprising:

a tuner for tuning a channel;

a program guide information detector for detecting program guide information introduced via the tuner;

a memory for storing the program guide information for each channel detected by the program guide information detector;

a key input for introducing a user manipulation command such as a program guide command or a channel search command;

a microprocessor which writes a program list based on program guide information stored in the memory in response to the manipulation command input via the key input and is programmed to search for accessible channels by controlling the tuner in a background operation while a user refers to the program list; and

a character signal generator for generating a character signal corresponding to the program list written by the microprocessor and providing the character signal to a screen.

20. The apparatus for acquiring and displaying a program guide command as claimed in claim 19, wherein the microprocessor is programmed so that the sequence of accessing channels can be determined by the adjacency between channels tuned before the program guide command is applied.

21. The program guiding apparatus as claimed in claim 20, wherein the microprocessor is programmed so that the order of priority of channels having the same adjacency can be determined according to a user's channel up/down command input via the key input before corresponding channels are accessed.

1 22. The program guiding apparatus as claimed in claim 21, wherein the
2 microprocessor is programmed so that channels can be searched for preferentially
3 in an upward or downward direction when no channel up/down command is
4 applied.

1 23. The program guiding apparatus as claimed in claim 19, wherein the
2 microprocessor is programmed to search for channels upward or downward from
3 the channel tuned before the program guide command is applied.

1 24. The program guiding apparatus as claimed in claim 19, further
2 comprising a probability estimator for calculating the probability that channels are
3 to be selected, by accumulating the number of times which the channels are
4 tuned, wherein the microprocessor is programmed to search for channels in the
5 order of priority according to a probability of tuning by channels calculated by the
6 probability estimator.

1 25. The program guiding apparatus as claimed in claim 19, wherein the
2 microprocessor is programmed so that when the program guide information of a
3 corresponding channel is not stored, a message screen for indicating "please wait"
4 or "acquiring guide information" is written and provided to the character signal
5 generator.

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